

poorly connected papers in a multi-authored proceedings. The papers in this book might have been better published in journals. I think the answer to the question, why publish a book?, lies more in the commercial dynamics of publishing than in any intrinsic merit of books as vehicles for interdisciplinary ideas. Books should have clear threads running through them. By their nature, they can offer extended treatment of a subject in depth. This book has neither. There are too many symposium volumes like it: publishers, please note.

ENVIRONMENTAL HYDROLOGY edited by Vijay P. Singh, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1995. No. of pages: 479. Price: \$259.00, £161.00. ISBN 0-7923-3549-X.

This book has an intriguing title. All hydrologists, whether they study the physics, chemistry or biology of water, might consider themselves to be studying the 'environmental' science of water. The first chapter makes an excellent attempt at defining the title and the scope of environmental hydrology, although one is left with the impression that the book might just have easily been entitled 'water quality'. Environmental hydrology is defined as 'the science dealing with space-time variability of water quality and its evolution in the hydrosphere, in streams, in lakes, in soil as well as in the lithosphere'. This opening chapter then promotes the ideals of integrated water management, which is to be applauded and supported. Nobody, surely, would argue that this is not the way forward for water resources management, and if environmental hydrology will provide the necessary tools to achieve integrated water management, the following chapters promise much.

The hope and expectation after turning the final page of Chapter 1 were that the bulk of the text would help provide an understanding of the myriad interconnections and internal/external influences on water quality. The book has chapters on river hydrology, solutes in surface waters, water and contaminant transport in the vadose zone, preferential flow of waters and solutes in the vadose zone, and groundwater quantity and quality modelling. These form the basis of the science, and might have been expected to form a set of sequential chapters following the introduction. Since the title of each of these chapters has in the past been used as that for an entire reference book on the subject, I had hoped for an emphasis on the basin-scale relevance of surface and groundwater quality and quantity, and on the important interactions between various water and solute pathways and

REFERENCES

- Higgins, C. G. and Coates, D. R. (Eds). 1990. *Groundwater Geomorphology; The Role of Subsurface Water in the Earth-Surface Processes and Landforms*, Geological Society of America Special Publication **252**.
 LaFleur, R. G. (Ed.). 1984. *Groundwater as a Geomorphic Agent*, Allen & Unwin, Boston, MA, 390 pp.

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sources. But no, each chapter attempts to cover the entire subject area. Some aspects are covered in detail, and some are built from basic science to advanced equations, but many others are skimmed over and require a detailed knowledge of background material. This is definitely not a book for the non-specialist, but even for the specialist, it is an opportunity lost.

Other chapters, apparently randomly arranged within the book, cover acidic deposition, climate change, modelling subsurface transport of micro-organisms, nutrient loads, modelling water quality, and ecohydrological impacts. These all make for good case studies of aspects of environmental hydrology. It is a mystery why the acid deposition chapter is placed before chapters describing hydrological and chemical processes. It is also hard to determine the context of the section on climate change, well written though it is.

On the whole, this book is an interesting collection of chapters on subject areas which are related. It could have focused attention on the linkages between these areas, but sadly it does not. Each chapter is well written and the book is nicely produced. The editor is to be applauded for trying to promote a more integrated approach to water quality, but the book fails to stimulate new thinking on how to approach the problems of water quality and integrated management.

As to whether it is worth the asking price, perhaps a hi-fi analogy would be appropriate. Is it better to choose a single-branded system which looks stunning, but which has some poor quality components (say the amplifier or tuner)? Or is it better to mix and match components based upon their individual quality, which do not look so elegant on the shelf but sound better and can be put together within the overall budget of the alternative system? Most music-lovers would probably choose the latter.

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